DOCUMENT RESUME

ED 146 881 HE 009 461

AUTHOR Cerych, Ladislav
TITLE Access and Structure of Post-Secondary Education. From a Global to a Diffused System. Occasional Papers/Cahiers 1.
INSTITUTION European Cultural Foundation, Amsterdam (Netherlands).
PUB DATE Dec 75
NOTE 37p.; Originally presented to the International Conference on Higher Education (3rd, Lancaster, England, September 15, 1975) ; Parts of the document may be marginally legible due to print quality
AVAILABLE FROM Institute of Education, European Cultural Foundation, Amsterdam, The Netherlands

EDRS PRICE MF-$0.83 HC-$2.06 Plus Postage.
DESCRIPTORS *Access to Education; *Admission (School); Articulation (Program); Comparative Statistics; Educational Demand; *Educational Supply; Enrollment Trends; Foreign Countries; Higher Education; *Nontraditional Students; *Post Secondary Education; *Trend Analysis
IDENTIFIERS Europe

ABSTRACT

The extent to which the nature of the relationship between access and educational structure in Europe has changed recently is examined. The influence of two developments in higher education is emphasized: the relatively slower growth rates of enrollment and the spread of nontraditional forms of education. The trend toward universal access in higher education affects not only well-established mass structures but also systems in which not more than 15 to 20 percent of the age group attends postsecondary education. A "diffused" system is advocated in which there are blurred separations between its different levels and the teaching content of different institutions, with varying points of entry and exit. (LBH)

****
* Documents acquired by ERIC include many informal unpublished *
* materials not available from other sources. ERIC makes every effort *
* to obtain the best copy available. Nevertheless, items of marginal *
* reproducibility are often encountered and this affects the quality *
* of the microfiche and hardcopy reproductions ERIC makes available *
* via the ERIC Document Reproduction Service (EDRS). EDRS is not *
* responsible for the quality of the original document. Reproductions *
* supplied by EDRS are the best that can be made from the original. *
****

INSTITUTE OF EDUCATION

ED146881

Ladislav Cerych

ACCESS AND STRUCTURE OF POST-SECONDARY EDUCATION

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Institute of Education

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC) AND USERS OF THE ERIC SYSTEM."

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

European Cultural Foundation

HE009401

OCCASIONAL PAPERS

INSTITUTE OF EDUCATION

European Cultural Foundation

Ladislav Cerych

Director, Institute of Education

ACCESS AND STRUCTURE OF POST-SECONDARY EDUCATION

From a Global to a Diffused System

Occasional Papers/Cahiers

1

December 1975

This paper, by the Director of the Institute of Education of the European Cultural Foundation, was originally presented to the 3rd. International Conference on Higher Education at the University of Lancaster, 15 September, 1975.

© Copyright: Fondation européenne de la culture, Amsterdam.

The main assumption of this paper is simple: it is meaningless to talk of access to higher education without talking of access to all higher education institutions (i.e. to all post-secondary education) and, therefore, of the links also and relationships between various segments of this whole, or the lack of them. In other words, I believe there is little sense, and that, politically it might be dangerous, to propose measures concerning numerus clausus for particular institutions without considering the system of higher education in its globality, or to discuss selection criteria and methods applying to particular institutions (e.g. universities) without discussing the entire selection process throughout secondary education and across the whole spectrum of post-secondary education; that is to say, to discuss access apart from its relation to the overall structures of the system.

There is nothing new in this thesis: it has been extensively discussed and documented by several authors and institutions, and in particular by OECD several years ago (1).

The present paper attempts to analyse to what extent the nature of the relationship between access and structures has or has not changed recently, especially under the influence of what appear to be the two new major features in the development of higher education: the relatively much slower growth rates of its enrolments (or even their stagnation) and the spread of "non-traditional" forms of higher education.

The first section of the paper will recapitulate the main aspects and implications of the access-structures relationship as arising from what might be called the global or system concept.

In the next part, the two recent developments - and their consequences with regard to access - will be briefly discussed.

In the concluding section, an attempt will be made to present a revised concept of the access-structures relationship.

IMPLICATIONS OF A GLOBAL SYSTEM

Once it is accepted that higher education does not mean merely universities but all institutions which cater for students - most of whom have terminated their secondary schooling - technical colleges, normal schools, junior colleges, polytechnics, etc. ... the interrelationship between access conditions to the former and to the latter becomes by definition an inescapable issue - whether the system be unitary, binary or mixed. This is even more clearly the case when postulating what a really global system of higher education should be:

> "The main problem arising in all countries where new structures of post-secondary education have to be planned and developed seems to be one of the compatibility of two types of requirements. On the one hand, higher education must maintain and even strengthen its standards, it must ensure excellence both in

teaching and research; on the other hand, it must provide adequate educational opportunities to a mass of students whose interests, abilities and aspirations are extremely heterogeneous and often do not correspond to the traditional functions of universities. The crucial point is that these new mass educational opportunities are not allowed to develop into an isolated sector of 'second-class higher education', considered by both students and society in general as a cheap substitute for traditional full-time university education. In other words, mass higher education must avoid the situation which exists in most European systems today, namely a sharp split into 'noble' and 'less noble higher education." (2)

In many countries the differentiation between "noble" and "less noble" institutions had (and still has) as a corollary, or even as one of its causes, a differentiation in access conditions, the "noble" part of the systems applying more stringent requirements, the "less noble" sector being more liberal in its admission policies. For various reasons this is not true in several continental European countries (e.g. Germany, France, Norway), where different technical or vocational post-secondary establishments applied numerus clausus and selection procedures well before these were introduced at universities.

In any case, from a global point of view almost every existing post-secondary system until recently appeared as a mixture

of relatively selective and open institutions: numerus clausus and open faculties in Scandinavia, "grandes écoles" and universities in France, universities and further education colleges in the U.K., private or even some state universities and community colleges in the U.S., etc. Experience also shows that a relative opening of one segment of the system leads almost automatically towards selection in another, and vice-versa. On the level of the system, therefore, the real issue is not open access versus selections but the appropriate balance and relation between the open and selective sector as well as their "topography".

When the open access-selection issue is looked upon from a still broader point of view - i.e. of the whole education system - it becomes clear that even the so-called open sectors are only relatively open because more or less severe selection usually took place during the secondary school stage. In other words, up to the very recent creations of completely new patterns of post-secondary study (3) (the quantitative impact of which, however, still remains very small) there is always some selection and, as stated in an OECD report (4):

> "the distinction between systems in which universities select their students and those which have to accept everyone who has appropriate secondary school qualifications implies merely a distinction between systems with different strategic points and modes of selection."

Conceptually and practically, these strategic points, or more exactly the strategic phases of the global selection process,

are situated either during and at the end of secondary education (especially upper secondary education), at entry into higher education, or throughout higher education itself (selection through failure, mainly during the first one or two years). A comparative analysis shows that most countries and different institutions within them apply predominantly two of the three selection alternatives.

Table 1 on the following page illustrates this point.

The table is, of course, incomplete, and constitutes a simplification (in almost all institutions each of the three selection mechanisms or phases plays at least a small role), but it demonstrates the main point argued here: the importance of considering the selection process as a whole (5). In two cases - Japanese Imperial universities and American community colleges - only one of the columns is marked. This means simply that selection (i.e. elimination) during that particular phase is of special magnitude which leads to (or is caused by) a negligible selection at the two other phases. The table can also be interpreted in the light of more recent developments, which will be discussed in some detail later: countries with a generalised (mass) system of secondary education, i.e. countries where a large majority of the respective age group reaches the end of full (upper) secondary education - in Table 1, U.S.A., Japan and U.S.S.R. - and where, therefore, secondary education almost completely lost its selective function - shifted selection to the two upper phases of the process.

TABLE 1 - SELECTION PROCESS.

Selection Phase / Country and Institutions	Through Secondary	At Entry	Through Failure
FRANCE			
Grandes écoles	XX	XX	
Universities	X		X
GERMANY (1)			
Universities	X		X
ITALY			
Universities	X		X
JAPAN			
Imperial universities		XX	
Private universities		X	X
U.K.			
Universities	X	X	
Further Education Colleges		X	X
U.S.A.			
Selective universities and Colleges	X	X	
Community Colleges			XX
Non-selective state univ. & Colleges		X	X
U.S.S.R.			
Universities		X	X

Note: when two X's appear in one of the columns it implies that in the respective institutions the particular mode of selection has considerable weight.

(1) up to about 1972.

In the first place it should be stressed that each of the three selection phases defined here covers a range of modes and mechanisms of selection which might have completely different educational, social and political implications.

Thus, selection via secondary school can occur through at least three different processes (or their combination):

a) streaming (certain streams or types of school leading more easily than others to entry into higher education);

b) failure and drop out during secondary school;

c) secondary school leaving certificates (A levels, baccalauréat, Abitur).

Selection at entry into higher education might again use one of several possible forms - or their combination, with different weights attached to them: secondary school grades and/or grades obtained in the final examination, tests of different kinds, interviews, letters of reference, lottery, waiting lists, competitive examination.

Finally, selection through failure might imply a voluntary drop out (stop out) caused either by lack of motivation at the outset (the enrolment being purely formal), by "cooling out", by economic or social constraints, by failure or repeated failure at examinations after the first one or two years.

Table 1 above could be modified in the light of these considerations by subdividing each of its three columns according to the main selection modes of the three phases. This would provide a less simplified picture of the global selection process and show the interlinkages not only between the degree of selection occuring in the course of the three phases but also between the different selection mechanisms of the whole process (6).

Such a presentation would, for example, demonstrate the degree of correlation (positive or negative) between high drop out and reliance on secondary school grades or the relations between drop outs through lack of motivation and the existence or absence of different types of secondary schools.

Whether data for the elaboration of such a detailed table (especially if some quantification should be attempted) exists or not, is open to question; my purpose here is only to stress that this type of model - i.e. a picture of interlinkages between the different segments of the selection process - should be kept in mind both by students of higher education and by policy-makers attempting to introduce new measures of selection (or of opening up) at different strategic points of the post-secondary (and secondary) education spectrum.

The second observation to be made here concerns the politics of the selection process. As stated in an OECD document:

"The main problem here is the particular position of universities or, more exactly, of institutions which in the existing systems are associated with a special, almost sacrosanct function any change in which would be considered unacceptable. If Harvard, the Massachusetts Institute of Technology, Oxford or the University of Moscow made their admission criteria even more strict than they are already, very few would resent it; if French, German or Italian universities tried to impose a selective admission procedure, a major revolution might take place. In a sense, therefore, it can be said that the strategic points and modes of selection are to a great extent historically and sociologically rooted, if not determined."

Since this statement was made German universities have introduced measures of selection at entry, but they are accepted with great reluctance by the public, and contested at least as far as the criteria used are concerned. Government declarations in France and Italy, on the contrary, continue to reject any authoritative measures (numerus clausus). The French case is, indeed, interesting as an illustration of the deep sociological roots of the actual selection process: in 1968, a major argument of the protesting students related precisely to their opposition to any policy which attempted to introduce selection at entry into university. During that time, however, no significant protest was made - not even among the very radical students - against the existing severe selection measures at entry into the

"grandes écoles", even if in many other aspects these institutions were subject to drastic reform proposals.

In general, it can probably be said that established, hidden and diffused selection mechanisms, even if socially or individually unjust (such as selection through special secondary schools), are tolerated much more easily than newly proposed measures, even if they aim at more rationality and justice in the global selection process.

The same applies to different conditions of access to the various segments of the post-secondary system. Nobody in France, Germany or other continental European countries ever seriously objected to a de facto numerus clausus at institutions such as IUTs or Ingenieurschulen, with their less prestigious courses and degrees, while any limitation of entry into the "noble" universities was opposed from almost all sides.

In other words, it may often be insufficient to view the issue of access to higher education from a global system point of view and to plan reforms in the light of this more rational approach. The politics of the reform, i.e. its acceptability and the resistances which it encounters through the inertia of social attitudes, vested interests and misconceptions of all sorts, might, in the last instance, represent the decisive factor.

a) Slower Growth

Table 2 on the following page clearly demonstrates the slow down of growth rates in the majority of the 10 countries covered. The three exceptions to this trend are Germany, Italy and Yugoslavia. (8)

My purpose here is not to speculate on the different factors of this slow down or on possible explanations for the three exceptions, but to see the actual and potential impact of the new trend on the issue of access. In most countries, for instance, the appearance of slower growth rates coincides with very high rates of degrees awarded (see Table 3). The latter is, of course, a logical consequence of the rapid expansion of the sixties and of the inevitable time lag between increases in the number of new

TABLE 2.- ANNUAL GROWTH OF ENROLMENTS IN POST-SECONDARY EDUCATION (in %)

	1960/65	1965/70	1965/66	1966/67	1967/68	1968/69	1969/70	1970/71	1971/72	1972/73	1973/74
BELGIUM											
University type	9.4	8.9	10.2	10.0	9.5	7.5	7.9	7.9	1.7	1.5	1.9
DENMARK											
University type	15.7	9.1	1[illegible].4	12.[illegible]	5.5	7.4	8.7	9.1	8.9	5.0	4.9
Non-univ. type	5.2	5.9	5.5	[illegible].8	18.0	2.0	0.8	5.0	16.6	(2.7)	5.9
Total post-sec.	10.4	7.7	8.8	8.8	10.6	5.0	5.4	7.5	11.9	(4.1)	5.3
FRANCE											
University type	13.1	9.4	10.0	13.5	15.6	4.6	3.8	[illegible].5	5.1	0.8	(2.1)
Non-univ. type	13.5	6.8	1.0	8.6	[illegible].3	10.4	[illegible].8	8.9	8.2	6.0	(1.6)
Total post-sec.	13.2	8.9	8.4	12.7	[illegible].7	5.5	3.8	6.9	5.6	1.7	(2.0)
GERMANY											
University type	(4.7)	8.4	7.0	3.2	6.6	6.5	9.1	13.7	15.1	10.6	5.5
Non-univ. type	(5.2)	6.8	1.4	1.7	3.8	7.2	3.3	31.1	- 5.2	11.8	16.2
Total post-sec.	(4.[illegible])	7.9	5.8	2.9	6.0	6.8	7.9	17.1	10.6	10.8	7.6
ITALY											
Total post-sec.	8.4	10.8	12.3	9.4	10.1	11.7	10.7	11.2	(5.7)	4.6	
JAPAN											
University type	8.4	8.5	11.7	10.8	9.4	[illegible].7	3.9	4.4	4.1	4.4	
Non-univ. type	12.1	12.3	32.1	20.4	8.7	3.2	- 0.05	4.6	4.6	7.6	
Total post-sec.	8.9	9.0	14.2	12.6	9.3	6.1	[illegible].2	4.4	4.2	4.9	
SWEDEN											
University type	13.0	12.8	16.9	22.1	18.4	- 0.5	8.5	- 1.3	- 5.0		
Non-univ. type	9.4			7.8	10.0	21.4	11.2	(-19.4)	- 1.3		
Total post-sec.	14.2			19.2	15.0	3.0	8.9	- 4.7	- 4.4		

TABLE 2.- (cont'd) ANNUAL GROWTH OF ENROLMENTS IN POST-SECONDARY EDUCATION (in %)

	1960/65	1965/70	1965/66	1966/67	1967/68	1968/69	1969/70	1970/71	1971/72	1972/73	1973/74
UNITED KINGDOM											
University type		8.4	14.1	9.8	8.0	5.9	4.3	4.2	2.9	2.6	
Non-univ. type		5.1	8.3	10.7	4.9	- 0.3	2.2	0.9	- 0.1	0.4	
Total post-sec.		6.7	11.1	10.3	6.4	2.8	3.3	2.6	1.5	1.6	
U.S.A.											
University type	8.4	6.1	6.4	6.8	5.9	5.6	5.6	1.6	1.3	1.9	
Non univ. type	13.3	14.1	12.3	14.4	19.3	18.5	6.6	5.8	3.8	7.4	
Total post-sec.	9.1	7.5	7.4	8.1	8.1	8.0	5.8	2.5	1.8	3.0	4.5
YUGOSLAVIA											
University type	1.3	9.2	3.3	6.[illegible]	15.0	9.7	11.3	7.7	8.3	11.6	7.2
Non univ. type	16.7	3.4	9.7	9.6	1.7	- 7.2	4.[illegible]	9.2	3.4	2.6	15.1
Total post-sec.	5.7	7.1	5.7	7.8	9.8	3.6	8.9	8.2	6.8	8.9	[illegible]
NETHERLANDS											
University type	9.6	9.9	10.6	9.3	8.8	10.4	10.4	9.2			
Non-univ. type	5.2	7.4	5.0	9.7	8.5	7.0	6.9	5.7	3.[illegible]	4.2	4.3
Total post-sec.	6.9	8.5	7.4	9.5	8.6	8.5	8.5	7.[illegible]			

TABLE 3. - ANNUAL GROWTH RATES OF DEGREES AWARDED (in %)

	1965/66 - 66/67	1966/67 - 67/68	1967/68 - 68/69	1968/69 - 69/70	1969/70 - 70/71	1970/71 - 71/72	1971/72 - 72/73	1972/73 - 73/74	1973/74 - 74/75
BELGIQUE									
Univ. 1st level	5.8	13.9	14.6	12.9	6.2	10.7	- 1.2	6.9	
Doctorate	31.4	- 11.2	35.5	3.0	- 1.2	33.4	0.1	13.0	
DENMARK									
Univ. 1st level	3.0	10.9	10.9	24.7	11.5	8.5	7.3		
Doctorate	21.4	- 22.0	17.0	6.4	- 9.1	- 1.6	[illegible].1		
Non-university	[illegible].3	- 0.9	27.0	1.9	7.7	9.4			
FRANCE									
Univ. 1st level	33.3	7.3	10.2	- 4.7	21.4	21.6			
DES+Masters	38.2	94.0	- 5.7	29.9	- 9.2				
Doctorate	17.4	[illegible].6	7.3	22.5	- 13.3				
Non-university	17.0	[illegible].8	- 14.3	45.4	7.3	(5.0)	10.4		
GERMANY									
Univ. 1st level	22.7	0.0	1.0	4.4	1.8	1.8	1.5		
Doctorate	7.8	19.3	7.1	3.8	2.7	0.9	1.7		
Teach.Train.	- 17.5	24.8	0.0	34.1	16.5	9.1	6.7		
Fachhochschulen	9.3	0.0	- 1.1	5.7	7.0	3.0	2.9		
ITALY									
Univ. 1st level	5.7	30.1	17.7	20.9	8.2	6.2	- [illegible].1		
JAPAN									
Univ. 1st level		5.1	3.8	11.9	10.6	13.3	7.3	1.4	
Masters		26.3	21.9	2.2	0.7	14.9	3.2		
Doctorate		10.8	9.3	7.4	7.0	5.7	4.5		
Non-university		34.9	34.1	10.9	3.3	2.3	0.7	6.1	
NETHERLANDS									
Univ. 1st level	16.2	12.3	15.1	11.5	12.3	13.0	7.6	6.1	
Higher levels	24.1	39.8	- 1.4	- 9.1	5.4	13.2	2.6	- 15.0	
Non-university	(9.4)	12.7	17.1	(5.6)	(- 10.4)	(2.2)			

TABLE 3. - (cont'd) ANNUAL GROWTH OF DEGREES AWARDED (in %)

	1965/66 - 66/67	1966/67 - 67/68	1967/68 - 68/69	1968/69 - 69/70	1969/70 - 70/71	1970/71 - 71/72	1971/72 - 72/73	1972/73 - 73/74	1973/74 - 74/75
SWEDEN									
Univ. 1st level	15.4	16.9	53.3	7.6	26.2	2.7	3.7		
Higher levels	19.6	15.0	- 1.3	7.7	11.4	25.2	0.4		
Non university	6.9	2.9	(15.4)	4.1	(- 9.0)	11.0			
UNITED KINGDOM									
(1)	11.6	14.9	6.6	7.5	8.5				
(2)	81.9	10.3	(211.0)	69.1	52.7	36.1	28.6		
(3)	17.1	12.9	7.6	9.0	6.6				
(4)	12.4	12.5	13.5	- 9.0	14.0	1.7			
(5)	5.2	2.7	11.1	- 6.0	2.3	10.2	- 0.9		
U.S.A.									
BA's & 1st prof. deg.	7.2	12.9	14.6	8.2	6.1	5.6	(6.9)		
MA's	12.2	12.1	9.6	7.5	10.6	8.5	(0.5)		
Ph.D's	13.0	12.0	13.4	14.0	7.5	3.8	(3.2)		
Associates	24.7	14.5	14.9	12.4	22.[illegible]				
YUGOSLAVIA									
Univ. 1st level	3.2					0.05	7.8	15.0	9.2
Masters	- 1.5			14.4	58.7	- 8.9	25.6	34.6	
Doctorate	- 2.9			9.6	62.4	17.[illegible]	- 0.5	23.0	
Non university	3.2					- 0.6	0.6	12.5	12.2

(1) first level degrees and diplomas in universities and Further Education
(2) first level degrees and diplomas in Further Education
(3) Higher degrees and higher diplomas in universities and further Education
(4) Courses for non-graduates only
(5) IND and INC

TABLE 4.- ANNUAL CHANGES OF POPULATION (in %)

Country	Age group	Period		
		1965/70	1970/75	1975/80
Belgium	18-23	+ 3.9	+ 0.2	+ 1.1
Denmark	20-24	+ 2.9	- 2.4	- 0.4
France	18-23	+ 6.5	- 0.8	+ 0.1
Germany	20-25	- 3.5	+ 1.7	+ 1.8
Italy	19-25	+ 1.0	- 0.3	+ 0.4
Japan	18-22	+ 4.1	- 5.6	- 1.2
Netherlands	18-24	+ 3.5	- 0.7	+ 0.8
Sweden	20-24	+ 3.1	- 3.7	- 0.4
United Kingdom	18-22	+ 0.3	- 1.0	+ 2.5
U.S.A.	18-23	+ 3.2	+ 2.7	+ 1.4

Source: L'évolution démographique de 1970 à 1985 dans les pays membres de l'O.C.D.E.; OCDE, Paris 1974

entrants and those related to degrees awarded. Conversely, it can be noted that in two of the three countries constituting an exception to the general trend (Germany and Yugoslavia) the growth of enrolment in the sixties was of less magnitude. Whether there is a direct relation of cause and effect between the appearance on the market, in the early seventies, of a heavily increased number of graduates and the slackening of demand for entry into higher education is, of course, another question.

To a certain extent at least the demographic factor contributed in most countries to a slow down of demand in the course of 1970-75. As Table 4 indicates, in all countries under review, with the exception of Germany, the age group concerned by higher education was declining in absolute figures during that period, or increasing less rapidly in the case of U.S.A. and Belgium, while during 1965-70 relatively high growth rates generally applied. For the forthcoming quinquenium (1975-80), the negative impact of the demographic factor will again be attenuated or even reversed without, however, reaching the rates of 65/70 (Germany again being an exception).

The nature of the problems of access in the forthcoming years will, of course, be rather different according to whether the present slower growth rates, or even stagnation, will persist, or whether, as G. Williams suggests, we are witnessing merely a cyclical movement which will inevitably lead to an upturn in the not-too-distant future.

So far it seems that the general slow down has not as a rule affected the university more than the non-university sector. In some countries this was obviously the case (e.g. community colleges in the U.S.A.), and some available data (not shown in Table 2) indicates that in some others this happened in the course of the last or present academic year (e.g. technical education in Belgium, polytechnics in the U.K.). But it can certainly not be said that the "less noble" sector of higher education has increased overall its relative weight as a consequence of slower growth rates in the system as a whole. On the contrary, any of the new policies, in force or in preparation, tending to limit access to higher education (numerus clausus) concern almost exclusively the "noble" university sector, or at least certain of its branches (e.g. medicine), which seems clearly to indicate that the power of attraction of this sector remains in most cases still higher than that of the non-university institutions.

In other words, it appears that the slower quantitative development per se has not led to substantial changes in the structure of the system and of the relationship between its main segments. A real proof of this would, however, require more information and data, especially on the latest transfer rates between the different parts of the post-secondary systems.

At the end of the sixties, OECD prepared a classification of the emerging structures:

"(a) integrated comprehensive university model, e.g. German Gesamthochschule and Danish University Centre projects;

(b) binary model (U.K. and, partly, Ontario in Canada);

(c) combined development model (e.g. Norway, emphasising the development of a new network of district colleges and a partial reform of universities with close linkages between the two; France with its radical reform of universities and the creation and development of IUTs; Yugoslavia, Belgium, and to some extent the U.S.A.);

(d) first cycle multi-purpose college model (e.g. CEGEP in Quebec, potentially or partly U.S.A.)." (9)

Today, it is still a completely open question as to which of these four models (or "ideal types") will predominate and/or will prove most appropriate to the new stage of higher education. The integrated comprehensive university model seems to be less popular precisely in countries where it was most strongly advocated; the binary solution was certainly not extended beyond the U.K. and the CEGEP solution did not spread beyond Quebec; the essential characteristic of the combined development model, i.e. the establishing of closer and closer relations between the two sectors, continues in most cases to represent rather a

postulate than a reality. It may in fact be that a fifth pattern is emerging, partly as a response to the second major trend of recent years.

b) The Spread of New Access Routes

A few years ago Martin Trow formulated what might be called a theory of stages in the development of higher education. Others, and in particular OECD, have more or less independently reached similar conclusions, which introduce the concepts of elite, mass and universal access higher education and the problem of transition from one stage to another as a source both of tension and of transformation of the system. Two quotations will illustrate this thesis:

> "Mass higher education differs from elite higher education not only quantitatively but qualitatively. They differ obviously in the proportions of the age grade that they enrol, but also in the ways in which students and teachers view attendance in university or college; in the functions of gaining entry for the student; in the functions of the system for the society; in the curriculum; in the typical student's career; in the degree of student homogeneity; in the character of academic standards; in the size of institutions; in the forms of instruction; in the relationships between students and faculty; in the nature of institutional

boundaries; in the patterns of institutional administration and governance; and in the principles and procedures for selecting both students and staff." (10)

"Most countries are at an intermediary and critical stage, between elitist and mass higher education, the former having to be abandoned under the pressure of numbers and of a series of socio-economic factors, the latter requiring structures, content and organisational arrangements which have not yet been developed and only partly identified." (11)

And a little further on the same report poses the question of whether the difficulties and major tensions encountered in American higher education - which reached the phase of mass higher education some years ago - are not due to a new transition period, from mass to universal higher education. (12)

With respect to access, it can probably be said that elite higher education is characterised by the predominance of a single, rather narrow route, namely the academic (general) secondary school (lycée, gymnasium, public school) and its leaving certificate (baccalauréat, Abitur, A levels). As late as 1965, only 6% to 20% of the age group in different European countries qualified from this point of view.

The mass stage, as a whole, maintains access through completed secondary education, but the age group concerned becomes

much more important (60% to 80% as in Canada, U.S.A. or the U.S.S.R.), either because the originally exclusive academic secondary school starts to cater for a larger and larger proportion of the age group (e.g. Germany today); and/or because of other streams (technical) of secondary education which are recognized as qualifying for entry into higher education (e.g. Italy); and/or because of the spread of comprehensive secondary schools (e.g. Sweden, partly U.K.).

The universal access stage simply implies that those without complete secondary schooling have the possibility of entering into some form of post-secondary study. This form of access and study certainly existed even during the elitist stage: external degrees of the University of London, CNAM in Frnace, Zweite Bildungsweg in Germany, Folks hogschools in Scandinavia, etc. But in every case these forms of access and study either involved only a tiny minority of the student population or were considered as clearly distinct from the rest of the post-secondary systems - in a sense a less than "less noble sector". The characteristic of the last five to ten years is a certain, at any rate formal recognition which they begin to receive, possibly under the influence of permanent and recurrent education policies. The U.K. Open University, the State of New York scheme, the French University of Vincennes model allowing access of "non-bacheliers", the Swedish 25/5 scheme, are a few examples of this trend.

Some significant points should be made concerning this trend. First of all, it concerns the U.S.A. as well as Western

Europe; that is, a country which reached the mass stage many years ago and countries which are passing through the transitional phase from elite to mass higher education. We shall discuss below whether this fact does not justify a certain revision of the theory.

Secondly, it is probably very significant that new ways of access to post-secondary education are materializing both through new institutions (Open University) and the development of new patterns of access and study within existing - often traditional - establishments, whether belonging to the "noble" or "less noble" sector.

This implies that the new trend (towards enlarged access) does not necessarily lead to the emergence of a third "non-traditional" sector (in addition to the "noble" and "less noble") but that the new ways of access and study are penetrating into or being superimposed upon the existing system as a whole.

Quantitatively, of course, this mutation is still very restricted: some 40,000 Open University students, compared with the more than half a million enroled in the whole of British post-secondary education; a few thousand in the University of Vincennes or under the New York State scheme, compared with the total of some 800,000 or 10 million respectively. It remains a completely open question whether the presently marginal nature of the new routes will remain marginal or whether they will eventually become a key feature of the system. Past experience of great resistance to change on the part of higher education

would point in the former direction, but one element at least indicates that the latter might become the case: new ways of access are accompanied by new ways of study. If, in the past, second routes to higher education always remained very marginal, it was partly because a student entering "through the back door" had to follow exactly the same courses and undergo the same learning and teaching process as his more fortunate peers who entered through the front with the traditional educational background. Today, more and more of the traditional institutions introduce non-traditional ways of study especially by offering shorter courses, or modules, by breaking down three- to six-year sequences into approximately one- or two-year self-contained cycles (e.g. the French DEUG or the British Diploma of Higher Education). A student entering the Swedish 25/5 scheme might register for a full degree course, but he might also aim at only a segment of a normal degree course suiting his past education and qualifications, as well as his motivations and possibilities.

Once again, it must be underlined that these new forms of study still concern a very small proportion of higher education enrolments. However, they certainly do represent a powerful potential source of change, precisely because they are not located in particular institutions and do not constitute a specific sector of post-secondary education, but cut across the whole system.

TOWARDS A DIFFUSED SYSTEM

The recent situation seems in a sense to invalidate Martin Trow's and OECD's theory of stages in the development of higher education: the slow down in the growth of enrolments occurs both in mass systems and in systems which have hardly passed the elite stage. Similarly, the trend towards "universal access" higher education affects not only well-established mass structures but also systems where not more than 15% to 20% of the age group attends post-secondary education. But it can also be argued that due to increasing interlinkages between higher education systems of different countries and to the common problems posed in all countries (economic situation, unemployment, shifts in social value structures), a certain telescoping of the stages takes place whereby elite systems tend to develop into universal access systems without passing through the mass stage.

Only a few years ago it was assumed by many (13) that European systems would inevitably have to create a network of institutions constituting functional substitutes to American Community colleges (not necessarily institutions built on the model of these colleges but establishments assuming their role, i.e. providing alternative forms of post-secondary education to the growing and diversified clientele of the rapidly enlarged population of secondary school leavers). This assumption seems far from certain today: not because there would be less need for such a form of post-secondary education but because the system might eventually provide it in a diffused way, without clear ties to specific institutions. The point can probably best be illustrated by the development of short-cycle higher education. Again, a few years ago, the strengthening of these institutions was generally considered a top priority in the reform of post-secondary education (14): yet, as was shown earlier, the recent period of slower growth did not generally increase their relative weight within the system - unless, of course, this impression is due only to the insufficiencies of our statistical apparatus. It becomes, indeed, more and more difficult, if not impossible, statistically to distinguish students in short- and long-cycle courses and, for that matter, students of university and non-university higher education. Thus, for example, British or French students following courses leading to Diploma of Higher Education or the DEUG respectively might be considered as short-cycle students, even if statistically they are part of university (long-cycle) enrolment. Conversely, those attending transfer courses in American community colleges, although statistically appearing under short-cycle (or non-university) higher education, might, if

they actually transfer, represent merely first or second-year students of a full ("long-cycle") degree course.

To the extent that the principles of recurrent education ("stop-out stop-in" or ideas of a modular system) become general, this indistinctiveness (in terms of levels) of the student population will, of course, become stronger still. And even the calculation of the total figures of post-secondary enrolments will have to be revised. Thus, if Open University students had been included in U.K. figures after 1970, almost no slow down in the growth rate of British higher education would have appeared in the statistical series of total enrolments.

This does not, of course, necessarily mean that we are witnessing the development of a system in which the existing antagonism between "noble" and "less noble" institutions will be replaced by a network of comprehensive universities. As already mentioned, it does not seem that this formula, which had strong support in several countries in the late sixties, is gaining relative weight. Roskilde in Denmark, Lougborough in the U.K., Brehmen and a small number of other universities in Germany, remain relatively isolated experiences (15). Similarly, institutional differences and hierarchies continue to exist although, probably, their nature is changing. The distances (in terms of prestige) between Oxbridge and the rest of the English universities is certainly not what it was only 15 years ago, not to mention that several of the polytechnics have in many ways (for example, with regard to admission requirements) acquired status and power of attraction comparable to those of universities.

In France, more and more of the provincial universities are considered, at least in some of their departments, equal or superior to Paris.

Changes in conditions of access (both to university and to non-university institutions) play a key role in this respect, of course.

Referring to Table 1 above, and as already stated, the most important phase of the selection process in Europe - namely selection (or elimination) through secondary education - is losing its key importance. This happens not only thanks to the "massification" of secondary education but as a result of the short cut which tends to be taken by many European countries, i.e. admission to post-secondary education for those without complete secondary education. In the model's logic, this should inevitably lead to the strengthening of the selective role of phase two and/or three (selection at entry and/or through failure). Admission policies to medical studies in Germany and France represent the two almost extreme prototypes of this development. In the former case, only students with a secondary school leaving certificate grade average of 1,6 (on a six-point scale with 1 as a maximum) are admitted; in the latter, more than 7.6 do not succeed in examinations after the first year of pre-medical studies. It must not be forgotten, however, that the new trend also implies new forms of access and study which, almost by definition, exclude the concepts of selection and drop out, or at least give them a completely different meaning and nature. These new forms of access and study, let us repeat, have penetrated

into both universities and non-university institutions. Except in a few cases, they do not constitute an additional new segment of the higher education system, nor do they replace existing elite or mass institutions. They are, potentially at least, a new dimension of the system which might partly dissolve or attenuate the opposition and tension between the "noble" and "less noble" sectors. It is possibly inappropriate, especially in Europe, to call this new stage in the development of higher education the stage of universal access; for lack of a better name, and in view of some of its main characteristics, I therefore suggest the term "diffused system": diffused because of the blurred separations between its different levels and the teaching content of different institutions; because of the indetermination regarding its points of entry and exit; diffused also because it becomes more and more difficult to define what is and what is not higher education.

Anything diffused is, of course, subject to great instability and uncertainty. But this, in a sense, might also be an essential characteristic of present higher education. Several years ago, Lord Ashby wrote that universities are like living organisms; they pass through long periods of stagnation and then through sudden periods of hybridation and mutation. This metaphor, surely, applies also to higher education as a whole, to its structure and interrelations between its different segments and aspects, as well as between higher education and society. But it is certainly very difficult - and may be impossible - to predict the outcome of any hybridation or mutation process, especially if you are in the middle of it.

NOTES AND REFERENCES

(1) See especially: OECD Towards new structures of post-secondary education, Paris 1971, Short cycle Higher Education Paris 1972, "Overall Issues in Development of Future Structures of Post-Secondary Education" in Policies for Higher Education, Paris 1974. Also: L. Cerych + D. Furth: "On the Threshold of Mass Higher Education" in The World Year Book of Education 1971/72, Evan Brothers, London.

(2) L. Cerych and D. Furth, op. cit. This article draws heavily on the work of OECD in this area.

(3) See below.

(4) "Overall Issues in the Development of Future Structures of Post-Secondary Education",op. cit. p. 33.

(5) The point has, of course, been demonstrated in many studies, starting with the well known Frank Bowles report Access to Higher Education, UNESCO 1964, up to the OECD report Admission Policies in Post-Secondary Education by J.P. Pellegrin, in Towards Mass Higher Education, Paris 1974, see especially pp. 68/69.

(6) Some comparative scores attributed to the importance of each of these mechanisms might allow the building up of a theoretical model of the global selection process.

(7) OECD: Policies for Higher Education, op. cit.

(8) Tables 2, 3 and 4 are based on data collected fro official national sources by the Institute of Educ tion in the framework of a study undertaken for the International Council for Educational Development, New York. Th OECD classification (as established in "Development f Higher Education 1950-1967", Paris 1971) was used.

(9) Towards New Structures, op. cit. p. 39.

(10) Martin Trow "Problems in the Transition from Elite to Mass Higher Education" in OECD Policies for Higher Education, Paris 1974, p. 61/62.

(11) OECD, Towards New Structures, op. cit. p. 28.

(12) idem p. 32. For an illustrative chart of the main characteristics of elite and mass higher education, see Barbara Burn: The Emerging System of Higher Education in Italy, ICED, New York 1973, p. 36.

(13) Including the the author of this paper.

(14) See in particular: OECD, Short-Cycle Higher Education, Paris 1973.

(15) In Germany, the discussion between supporters of the "integrated" and "cooperative" comprehensive university seems to have turned to the advantage of the latter.

The Series «OCCASIONAL PAPERS/CAHIERS» presents short studies and original essays by collaborators of the Institute of Education.